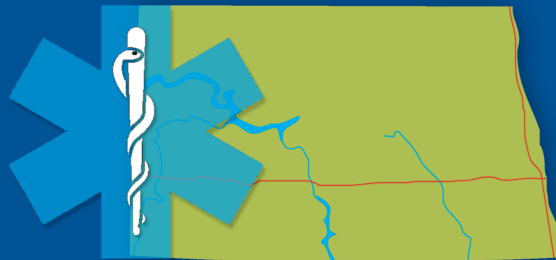


**AN INTRODUCTION TO
RURAL EMS MEDICAL DIRECTION
IN NORTH DAKOTA**



**Developed By
North Dakota Rural EMS Improvement Project
2011**

The North Dakota Rural EMS Improvement Project acknowledges:

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The North Dakota Division of EMS and Trauma

The North Dakota EMS Association's Medical Director Society

SafeTech Solutions, LLP

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Introduction

With the ongoing consolidation and regionalization of healthcare in rural North Dakota, out-of-hospital Emergency Medical Services (EMS) have increasingly become a vital part of the rural healthcare system. **The physician Medical Director is a vital component of the rural EMS system.** Emergency Medical Technicians (EMTs) and paramedics are required by North Dakota law to have a physician Medical Director overseeing their work.

However, rural EMS medical direction is rarely a primary occupation. Physicians come to this role in a variety of ways. You may be a new physician who just moved to a small town to start your first practice, only to find yourself greeted by the local ambulance service director who informs you that a physician is needed to sign EMT and paramedic recertification forms. You may be an established rural physician contemplating getting involved with your local EMS agency, but you are not quite sure what EMS is all about and are concerned about the demands and risks associated with this role. Or, you may be a current rural EMS Medical Director who is interested in knowing more about this role and perhaps deepening your involvement with your local EMS agency.

This brief guide is designed to introduce you, the rural physician, to rural EMS medical direction and what the role involves and requires in North Dakota. It is an introduction and provides a basic framework for understanding the role, its obligations and responsibilities. It is not a complete textbook nor is it a course in EMS medical direction. For comprehensive Medical Director education, you should refer to other more comprehensive resources and educational programs listed in this guide.

This guide will address the unique conditions and challenges of medical direction for rural and frontier EMS agencies in North Dakota and serve as an introduction to this important rural healthcare role.

Section I:

MEDICAL DIRECTOR IN NORTH DAKOTA

- **Overview of Medical Direction**
- **Educational Expectations for Medical Directors**
- **North Dakota Code Regarding Medical Direction**

Overview of Medical Direction

Simply put, medical direction is the physician oversight, or clinical supervision, of licensed EMS personnel. This oversight includes:

- **Physician involvement in education and training**
- **Credentialing EMS personnel for practice**
- **The development and maintenance of treatment protocols**
- **Participating in quality assurance**
- **Serving as a liaison between EMS and other parts of the medical community**
- **Providing leadership in system and dispatch issues that impact patient care**
- **Coordinate online medical direction**

Ultimately, the Medical Director is a patient advocate.

Medical direction is usually distinguished between online and offline roles. The offline Medical Director is considered the agency Medical Director, and this guide focuses on that role. Online medical direction is contemporaneous direction of EMS personnel by a physician either by phone, radio or in person. Those physicians providing online direction are important partners in the EMS system.

HOW NORTH DAKOTA DEFINES EMERGENCY MEDICAL SERVICES

“Emergency medical services” means the prehospital medical stabilization or transportation of an individual who is sick, injured, wounded, or otherwise incapacitated or helpless, or in a real or perceived acute medical condition, by a person that holds oneself out to the public as being in that service or that regularly provides that service.

The term includes:

- a. Assessing, stabilizing, and treating life-threatening and non-life-threatening medical conditions; or**
- b. Transporting a patient who is in a real or perceived acute medical condition to a hospital emergency room.**

North Dakota Century Code 23-27-02.2

Educational Expectations for Medical Directors

While EMS was recognized in 2010 as an emergency medicine sub-specialty with formal year-long fellowship programs, the majority of Medical Directors in rural communities are specialists in family medicine, surgery or internal medicine with limited exposure to EMS during the formal training period. These physicians usually need to obtain additional EMS-specific training to effectively function as an EMS Medical Director.

Medical Directors need to have a basic understanding of the following:

- **Scope of practice of individual providers**
- **EMS system design**
- **State EMS rules**
- **Quality assurance principles**
- **Treatment protocol development**
- **Dispatch and emergency medical dispatching principles**
- **Disaster and mass-casualty**
- **FEMA's National Incident Management System (NIMS) and the Incident Command System (ICS) training**

What Is Scope of Practice?

A set of skills defined in state law or rule and the treatment modalities for a given level of EMS provider.

EDUCATION OPPORTUNITIES

There are several options for Medical Director education:

The most well-known and established course is **The National EMS Medical Director's Course & Practicum®** offered by the National Association of EMS Physicians (NAEMSP) at their annual national meeting.

There is also an excellent online Medical Director course available at www.medicaldirectoronline.org. This course contains entry-level Medical Director training and is provided **specifically for rural Medical Directors**. The course and site was developed by the Critical Illness and Trauma Foundation.

An increasingly popular EMS Medical Directors conference is **The EMS State of the Sciences Conference** (also known as The Gathering of Eagles). This conference was started by large EMS system Medical Directors, but it continues to expand its offerings.

The American College of Emergency Physicians (ACEP) has an EMS Section that often provides education programs at ACEP's national and regional conferences.

Many rural Medical Directors will find these above opportunities more geared for larger, more urban systems, though the basic principles of medical direction and treatment modalities are the same.

AN AUTHORITATIVE REFERENCE RESOURCE
is sold by the National Association of EMS
Physicians titled:

- **Clinical Aspects of Prehospital Medicine – Vol. I**
- **Medical Oversight of EMS – Vol. II**
- **Evaluating Improving Quality in EMS – Vol. III**
- **Special Operations Medical Support – Vol. IV**

These volumes are available at www.naemsp.org.

North Dakota Code Regarding Medical Direction

North Dakota EMS Code requires that all licensed EMTs and paramedics may only function under the supervision of a physician. The physician is required to credential the provider and provide protocols for patient care.

Ambulance agencies may use First Responders, Emergency Medical Responders (EMRs) or CPR-certified personnel as ambulance drivers. Under North Dakota EMS Code, these personnel do not require physician supervision; however, they are part of the EMS response system in North Dakota, and it is vital that they be included in agency education, quality reviews and planning.

The state's provider licensure form requires the Medical Director's signature and expands upon the authority and responsibilities of the Medical Director. The Medical Director's signature commits the Medical Director to:

- **Ensure EMT and paramedic skills competency**
- **Determine skills and treatment modalities within North Dakota scope of practice**
- **Delegate authority for provider practice**
- **Restrict or revoke authority for provider practice**

While EMS is considered a practice of medicine, few state medical practice acts include the supervision and oversight of EMTs and paramedics as a practice of medicine. North Dakota is no different. However, North Dakota's Board of Medical Examiner's criteria for licensure action includes the statement "failure to monitor the . . . emergency medical technician" is criteria for action on a medical license (**Med Act 43-17-31**. Grounds for disciplinary action).

HOW NORTH DAKOTA DEFINES THE EMS PROFESSIONAL

"Emergency medical services professional" means an individual licensed by the department as an emergency medical technician-basic, emergency medical technician-intermediate, or emergency medical technician-paramedic.

North Dakota Century Code 23-27-02.5

The Medical Director's Authority and Requirements

- **Credential EMT and paramedic personnel**
- **Restrict scope of practice**
- **Participate in the development of a quality assurance program**
- **Ensure EMT and paramedic skills competency**

Section II:

MEDICAL DIRECTOR AND AGENCY

- **Relationship With Agency**
- **Reimbursement**
- **Liability Issues**

Relationship With Agency

It is important for the Medical Director to have a formal agreement in place with the EMS agency (ambulance service). This serves several purposes, including coverage for liability purposes, expectations, authority and compensation.

The Medical Director is either an employee or contractor to the EMS agency. The decision is really one of personal and agency preference and tradition. As an employee, there is usually clear delineation of responsibility and authority within the organization. Employee status also makes liability and workers' compensation coverage available

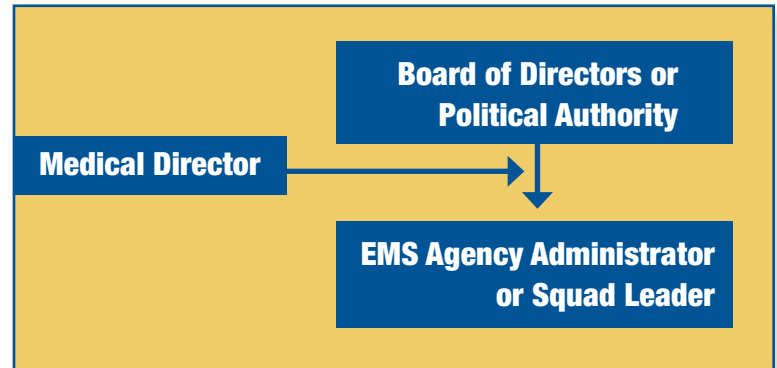
through the agency. As an independent contractor, the relationship and authority need to be spelled out in a Memorandum Of Understanding (MOU) or job description (*see pages 38-43*). Contract Medical Directors also have greater flexibility to deduct business expenses for any expense incurred while providing medical direction. This can include uniforms, Medical Director education and travel expenses.

The Medical Director needs to have a clear understanding of the organization of the EMS agency. If there is a Board of Directors or a political authority that funds or has statutory authority over the agency, then the relationship with this board or political body should be addressed. While agencies may have the Medical Director report to the agency operational administrator, there is a role for the Medical Director to interact with the board or political authority. The Medical Director needs to ensure policymakers understand patient care implications with regards to budgets and operations of the agency.

The MOU or contract should clearly include expectations the agency has of the Medical Director. This should include:

- **Authority and responsibility**
- **Expected attendance at agency meetings**
- **Frequency and process for chart review**
- **Protocol development**
- **QA activities**
- **Compensation for Medical Director time and expertise; and define coverage for administrative liability and workers' compensation issues**

Developing a good working relationship with the agency administrator is very important in being effective. The Medical Director and administrator need



to have the same vision and commitment to quality care and speak with a unified voice. Frequent leadership meetings between the Medical Director and agency leadership is very beneficial. These meetings allow for opportunity to review agency performance, clinical care, and any concerns or issues that need to be addressed.

It is also important for the Medical Director to develop a relationship with the individual EMTs and paramedics within the agency. The Medical Director needs to be able to convey his or her practice style and establish a culture by which patient care will be provided. To do this though, the Medical Director has to be more than “a signature.”

There are many opportunities for the Medical Director to interact with the agency, such as by attending training sessions, teaching at in-services and refreshers, and doing ride-alongs. In the end, to freely come forward with questions, concerns and requests for guidance, EMTs and paramedics need to feel comfortable with the Medical Director.

HOW TO BUILD A RELATIONSHIP WITH AGENCY AND FIELD PERSONNEL

- *Carry a pager or radio and listen to calls*
- *Attend training sessions*
- *Ride-along with crews*
- *Conduct run reviews*
- *Participate in disaster drills or field*

Reimbursement

Many Medical Directors receive no compensation for their service to the EMS agency. This seems to be based upon tradition or agency and physician preference. If Medical Directors wish to be reimbursed for their time and activities of medical direction, the compensation should be clearly outlined in an MOU with expected duties and time commitment. The Medical Director should consider the financial status of the agency as well when considering compensation.

There is concern, however, that accepting payment would open the Medical Director to liability issues. In North Dakota, EMS statutes immunity is given to Medical Directors who received payment up to \$10,000 for Medical Director services (**North Dakota Century Code Section 23-27-04.1**) [see box, page 14].

Liability Issues

Medical liability for Medical Directors is covered in North Dakota Code and provides immunity for Medical Directors who either volunteer or are reimbursed no more than \$10,000 a year per agency [see box, page 14].

One area of liability that Medical Directors fail to consider and is not covered by the immunity statute is that of civil liability for sexual harassment, errors and omissions, wrongful termination and general administrative liability. This comes into play, for example, if the Medical Director has to restrict a provider's scope of practice and this has an impact on the individual's employment with the agency. Coverage for this liability is usually covered through a Director and Officer's Umbrella Policy, which should be carried by the ambulance service.

Individual physician coverage is available for both medical and civil liability issues with a program called DirectorShield. This program is customizable for individual situations and provides various levels of coverage for general liability, errors and omissions, sexual harassment, and medical liability. It unfortunately has a minimum premium of \$2,500, which can be quite expensive for low-volume agencies. This program is available at www.EDmedmal.com.

WORKMAN'S COMPENSATION

Workers' Compensation is also another area of coverage that should be addressed between the squad and Medical Director. If the Medical Director is injured during EMS training or a ride-along, assurance that medical costs are covered is vital. If the squad policy does not provide coverage, the Medical Director may need to carry his own policy.

CODES PERTAINING TO IMMUNITY, LIABILITY AND REIMBURSEMENT

**Physician immunity for voluntary medical direction. A physician is immune from liability while providing voluntary medical direction.
North Dakota Century Code 23-01.12-02**

Emergency care or services rendered by officers, employees or agents of emergency medical services operations — physician medical direction.

1) An officer, employee or agent of an emergency medical services operation and a physician licensed in this state who provides medical direction to an emergency medical services operation, who is a volunteer, who in good faith renders emergency care, services, or medical direction, is not liable to the recipient of the emergency care, services or medical direction for any civil damages resulting from any acts or omissions by the person in rendering the emergency care, services or medical direction provided the person is properly trained according to law.

2) For the purpose of this section, “volunteer” means an individual who receives no compensation or who is paid expenses, reasonable benefits, nominal fees, or a combination of expenses, reasonable benefits, and nominal fees to perform the services for which the individual volunteered, provided that the fees do not exceed \$10,000 in any calendar year.

3) For a volunteer physician providing medical overview to an emergency medical services operation and the operation’s personnel, the \$10,000 maximum fees amount is calculated separately for each emergency medical services operation for which the physician volunteered medical overview. This section does not relieve a person from liability for damages resulting from the intoxication, willful misconduct or gross negligence of the person rendering the emergency care or services.

4) An officer, employee or agent of any emergency medical services operation and a physician licensed in this state who provides medical direction to any emergency medical services operation who in good faith does not render emergency care, service, or medical direction to an individual based on a determination that transport of that individual to a hospital is not medically necessary is not liable to that individual for damages unless the damages resulted from intoxication, willful misconduct or gross negligence.

North Dakota Century Code 23-27-04.1

Section III:

MEDICAL DIRECTOR AND EMTs

- **Credentialing — Not Just for Hospitals and Physicians**
- **Protocol Development**
- **Quality Management**
- **Chart Reviews**
- **Clinical Errors**
- **Continuing Education**
- **Run Reviews**
- **Online Medical Direction**

Credentialing — Not Just for Hospitals and Physicians

When an EMT or paramedic joins the EMS agency, it is the responsibility of the Medical Director to decide whether the licensed individual is ready and prepared to provide quality medical care. A process needs to be in place to ensure that the new EMT or paramedic can provide a high quality of medical care. Most agencies have an orientation program, but this can vary from an informal tour and a few ride-alongs to a standardized protocol test and field internship program.

The familiar concept of physician credentialing can easily be transitioned to the EMS environment and utilized for EMTs and paramedics. The credentialing process should include:

- **Verification of state licensure**
- **Clear requirements for initial and continuing education**
- **A process for skills verification and maintenance**
- **Defined field internship objectives**
- **A testing of protocol knowledge**
- **An orientation to the ambulance vehicle, equipment and agency operations**
- **An orientation to dispatch and communications**

The credentialing process should be clearly outlined in a checklist that the provider and agency administrator can complete and present to the Medical Director for review and evaluation (*see form on page 36*). The credentialing process is best completed with a final interview between the provider and the Medical Director. This allows the Medical Director an opportunity to meet new EMTs to the agency and be satisfied they are prepared to provide care. This final interview can include a review of protocols and even an oral case exam.

Protocol Development

One of the more basic but daunting tasks of medical direction is that of protocol development. While EMTs are educated on standard treatments for specific conditions, it is through the use of protocols that patient care is delivered. For the Basic Life Support agencies, these protocols can be simple, but they become increasingly more complex for Intermediate Life Support and even more so for Advanced Life Support agencies.

Use of the statewide protocols is

always the simplest and most effective practice. These protocols have been developed and vetted for appropriate treatment practices. It also allows for standardized treatment across agencies and systems, yet the Medical Director is still responsible for reviewing and adopting these protocols for the agency.

There are situations, however, when the Medical Director may wish to augment the state protocols with additional protocols to address specific modalities, skill sets, or new equipment

SAMPLE CARDIAC ARREST PROTOCOL

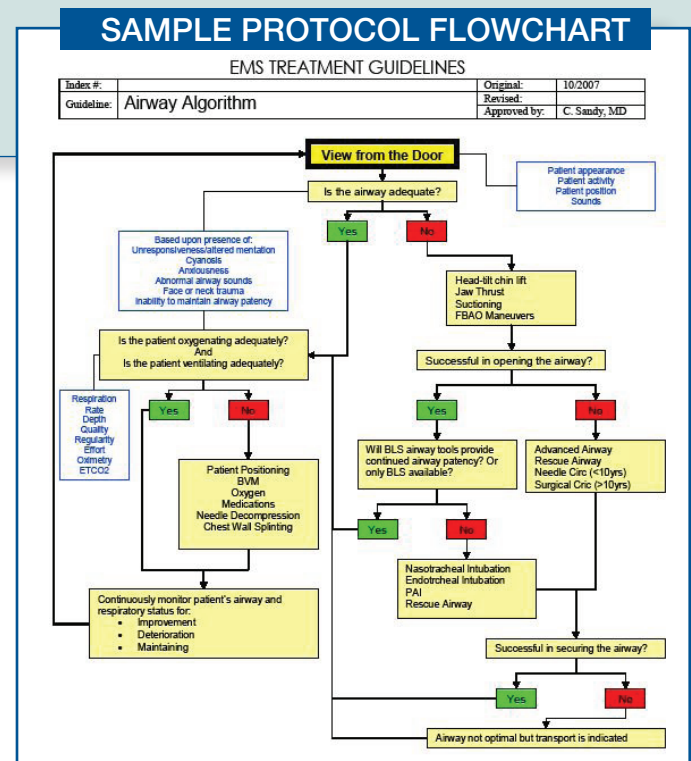
The goal in the cardiac arrest patient is: rapid assessment, rapid intervention by establishing an adequate airway, ongoing CPR, application of an AED, and defibrillation. Transport should be started as soon as practical, and ALS intercept called for early. Treatment needs to be ongoing during all phases of transport. CPR and ventilation may need to be stopped to facilitate some phases of patient transport.

These interruptions should be minimized as much as possible by evaluating all phases of patient extrication and transport prior to carrying out the individual steps. Early notification of the receiving emergency department and medical control is necessary. Although individual treatments are listed individually in practical application, many steps are carried out simultaneously when they can be.

- 1) **Baseline care standards.**
- 2) **Establish that the patient is pulseless and breathless. Begin CPR.**
- 3) **If cardiac arrest was unwitnessed or EMS arrival to the patient is estimated to be more than 5 minutes since the patient went into arrest, complete 2 minutes of CPR prior to defibrillation.**
 - *During initial administration of CPR, the AED should be attached to the patient.*
- 4) **If cardiac arrest was witnessed and EMS arrival to the patient is estimated to be less than 5 minutes since the patient went into arrest, attach the AED to the patient and check rhythm prior to beginning CPR. Follow prompts given by AED.**
- 5) **After the first and all subsequent defibrillations, immediately begin CPR for 2 minutes.**
 - *CPR should not be delayed for rhythm or pulse checks unless signs of circulation have returned.*
- 6) **A maximum of 3 defibrillations may be delivered on scene prior to initiating transport.**
- 7) **If the AED advises no shock, initiate transport with rhythm checks by the AED occurring approximately every 2 minutes.**
- 8) **Manage airway per protocol.**
- 9) **Call for ALS intercept.**
- 10) **Transport.**

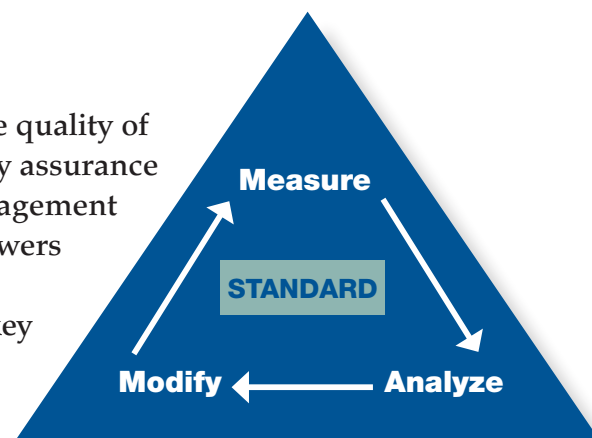
and technologies, such as CPAP, BiPAP or multi-lumen airways. In developing protocols, consider the following:

- **Flowchart and diagrams are easier to reference by crews while on scene or en route to calls.**
- **Protocols should to be reviewed at least every two years and updated as needed.**
- **A process needs to be in place to update or change protocols and distribute those changes to personnel.**
- **Protocols need to be in compliance with scope of practice.**
- **New treatment therapies or modalities should be based upon accepted evidence-based research.**



Quality Management

Medical Directors have ultimate responsibility for the quality of care provided within the system, and a solid quality assurance program is the key. Too many times, though, quality management seems like a daunting task, especially when statistical powers and t-tests are thrown into the mix. Quality assurance programs, however, do not need to be complicated. The key is to start small. This usually means looking at data from a retrospective view using patient care report data and only looking at one factor at a time.



Quality management follows a simple pattern:

- **STANDARD:** Establish standard and provide education
- **MEASURE:** Measure performance against the standard
- **ANALYZE:** Analyze and evaluate results
- **MODIFY:** Make any necessary changes to operations or practice
- **REMEASURE:** Reevaluate the performance

When establishing treatment and operation standards, the Medical Director needs to ensure the standards are medically appropriate, realistic and attainable.

Response time is determined as the interval between the time the patient's location, callback number, and patient problem type are known, and the time the ambulance crew arrives on scene. Response time standards for suburban and rural areas can differ based on the needs and the configuration of each EMS system and as approved by the Medical Director.

North Dakota EMS Protocols

State-sanctioned protocols with instructions can be found online at www.ndhealth.gov/ems/protocol.htm.

NORTH DAKOTA SUGGESTED EMS QUALITY ASSURANCE PROTOCOL

The goal of this protocol is to develop a structure to ensure that the patients are being treated according to accepted medical standards and protocol. The ambulance service manager plays an important part in the quality assurance program. If the medical director is unable to review each Patient Care Report (PCR) it falls on the manager to develop a system whereby each call is reviewed internally by an objective third party to ensure basic standards are met and referring certain PCRs to the Medical Director.

EVERY PCR MUST BE REVIEWED FOR THE FOLLOWING:

- At least two complete sets of vital signs are recorded
- Specific treatment protocols were followed.
- The PCR is complete including an accurate narrative.
- The PCR is signed by the primary care provider.

PCR'S FOR PATIENTS EXHIBITING THE FOLLOWING SIGNS, SYMPTOMS OR IMPRESSIONS MUST BE FORWARDED TO THE MEDICAL DIRECTOR FOR REVIEW:

- Cardiac Arrest
- Chest Pain
- Airway Compromise or Respiratory Arrest
- Major Trauma
- Stroke
- Unconscious or Unresponsive Patient
- Pediatric Patient
- Use of Restraints

MEASURING RESPONSE TIMES

It has been a common practice in the past to report response times by using averages. This is an easy-to-understand methodology that calculates response times by adding all applicable response times together and then dividing the total number of minutes by the total number of responses to come up with an average. Unfortunately, measuring and reporting average response times is inadvisable because one-half of the patients may receive the required response time, while the bottom half do not. Given what has been learned about the need for an eight-minute response to maximize survivability from cardiac arrest, an average eight-minute response, by definition, means that one-half, or more, of the service's patients are not reached within that critical time.

Many rural areas may set longer response-time goals because of fewer requests for service and higher cost per transport. The use of averages in these areas can be a cause for even greater concern than in urban areas, as just one short response time can be used to offset several longer ones, with the result being resident or patient complaints about the inequity of the service.

FRACTILE RESPONSE-TIME MEASUREMENT

Rural services, like many high-performance emergency ambulance services, should use a different methodology to measure response times to ensure service equality to all patients: fractile distribution reported at the 90th percentile. This methodology places each response within the minute it is achieved and stacks the minutes in ascending order to establish a fractile response-time distribution. The point at which the fractile response time crosses the percentile measures the point of the service's response-time reliability — a predetermined response-time standard based on the service area's demographic and geographic factors, combined with a realistic funding level. In many urban settings, the time standard is set within eight minutes and is based on cardiac research. In suburban and rural settings, where call volume may be lower because the population is geographically scattered, 15 or 20 minutes may be used as the response-time requirement, depending on the financial resources available.

For example, setting a standard of a chute time (dispatch to response) of one minute may be appropriate for an agency whose crew stays in quarters, but for a volunteer agency whose personnel respond from home, it may be an impossible standard to meet. However, if the latter agency's chute times are consistently 10 minutes or more, then modification to the response procedure may be necessary.

DEFINITION OF FRACTILE RESPONSE TIME

The fractile time indicates that a predetermined response interval is being met for a defined percentage of events.

The use of the 90% fractile (90% of the calls responded to within a certain response interval) should be considered.

SUGGESTIONS FOR QUALITY MONITORING

General

- **Fractile times:**
 - *Call receipt to dispatch (activation)*
 - *Dispatch to response (chute)*
 - *Response to arrival at patient (response)*
 - *On-scene times*
 - *Total out-of-hospital times — call receipt to arrival at hospital*
- **General Documentation**
 - *Legibility and sensibility of written reports*
 - *Appropriateness of treatments per protocols*
 - *All procedures in scope of practice*
 - *Time-critical diagnoses (STEMI, Stroke, Trauma) interventions and destination decisions*
- **Training**
 - *Infrequent skills practice and demonstration*
 - *Case presentations*
 - *Paramedic intercept scenarios*

Medical

- **Aspirin for cardiac chest pain**
- **Blood glucose for altered mental status**
- **12-lead for syncope**
- **12-lead for chest pain or angina equivalents**

Trauma

- **On-scene times**
- **Appropriate spinal immobilization utilization**
- **Air medical utilization**
- **Preservation of temperature**
- **Fluid resuscitation**

Cardiac Arrest

- **CPR density — amount of time a patient receives CPR**
- **Length of CPR interruptions**
- **Time to first shock**
- **Compliance with CPR intervals**
- **Rate of ventilation**

Chart Reviews

Most quality assurance programs include chart review as a component. While it is retrospective and not the gold standard of a prospective quality program, chart review can give you good insight into the quality of care provided.

It is also good practice to review all calls where the patient refused care or transport or they signed an AMA form.

Each agency should have a single individual responsible for these chart reviews and provide the Medical Director with the necessary charts for review.

When reviewing charts, one must remember to evaluate it from the EMT's or paramedic's point of view and educational level.

- **Is the chart complete?**
- **Is there an appropriate narrative that provides an adequate history of the events and treatment?**
- **Was the appropriate protocol followed based upon the chief complaint?**

Focusing on a specific question or intervention is also another productive method of chart review.

- **Did the chest pain patient receive aspirin?**
- **Was there documentation of c-spine immobilization for qualifying trauma patients?**

Providing feedback is always a challenge but should be viewed as part of the continuing educational process for the EMT or paramedic. This is especially important in low-volume agencies and with high acuity calls. This feedback can be provided individually in person, during an agency in-service, or through the WebPCR. Feedback needs to be timely to maximize the educational benefit.

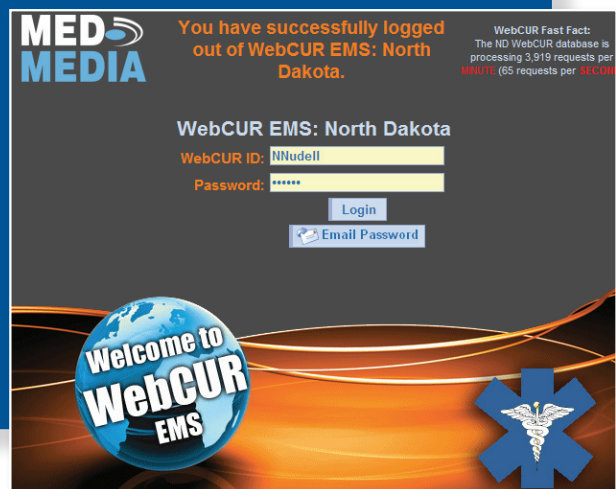
The Medical Director should provide feedback to EMTs and paramedics on all calls with critical patients and all calls where there was a patient death after EMS initiated care. The Medical Director is viewed as the highest medical authority for EMTs and paramedics, and having verbal feedback from the Medical Director is highly valued. Most EMTs and paramedics want to know about the care they provided and how it might have or have not impacted the patient. They also find the Medical Director's feedback helpful in making meaning of emotionally traumatic calls.

Access to Online Ambulance Reporting System

Utilization of the state WebPCR program, known as WebCUR, can be a key resource and already has many built-in quality management tools. This Web-based program can provide data on:

- Dispatch type
- Clinical impression
- Procedures performed
- Destination
- Response times

The WebCUR system can be accessed at <http://nd.webcur.com> from any Internet enabled computer. Contact Lindsey Narloch of Division of EMS and Trauma (701) 328-1062 or lindseynarloch@nd.gov for login and password.



North Dakota EMS Rule Requires the Medical Director to review the following calls:

- **Cardiac arrest**
- **Chest pain**
- **Respiratory arrest or airway compromise**
- **Major trauma**
- **Stroke**
- **Unconscious**
- **Pediatric**
- **Use of restraints**
- **Any protocol deviation**

(EMS rule, Ambulance Service 1.0.0 Quality Assurance All Levels.)

Clinical Errors

So what do you do when there is a question raised regarding the quality of medical care an EMT or paramedic has provided or if a patient complains about the treatment they did or did not receive? This is always a difficult situation, especially if the provider in question is a volunteer. The last thing a Medical Director wants to do is scare off these scarce providers, but he has a responsibility to ensure the quality of care provided is appropriate.

Most EMTs and paramedics truly want to provide good care and are highly motivated to perform well. The run or call review process should take advantage of this and be looked at as an opportunity to learn and improve as opposed to a punitive action.

The initial step in addressing quality issues is to look at the root cause of the issue by considering the following questions:

- **Was it an atypical presentation that wasn't recognized?**
- **Often Occam's Razor comes into play, and providers should be reminded that "When you hear hoofbeats, think horses, not zebras."**
- **Is there a lack of education basis regarding this particular illness or condition?**
- **Is there a system-wide problem?**
- **What were the circumstances the EMT or paramedic faced in making decisions regarding care?**

Remember to put yourself in the position of the EMT or paramedic — upside-down, in the ditch, in the dark, in the snow — when making a judgment on the care.

Once the root cause has been identified, then an appropriate remediation or action can be addressed. This may include simply having a discussion with the EMT or paramedic, or it may include an extra refresher or education on the given topic. This plan should be followed-up with a formal monitoring program to ensure actual change in performance.

Continuing Education

In order for EMTs to maintain licensure, they must meet relicensure requirements. These requirements are described in the rule below:

In addition to the state-required 24-hour refresher, other standardized training courses that can provide Continuing Medical Education (CME) include:

- **Basic Trauma Life Support (BTLS)**
- **Prehospital Trauma Life Support (PHTLS)**
- **Advanced Medical Life Support (AMLS)**
- **Pediatric Education for Prehospital Providers (PEPP)**
- **Advanced Burn Life Support (ABLS)**
- **Emergency Vehicle Operation Course (EVOC)**

Medical Directors should be actively involved in the continuing education process for EMTs and paramedics. This not only includes CME approval but also includes teaching EMTs and paramedics on a routine basis. The continuing education topics should include the required topics and hours required during the two-year recertification cycle.

Content for each topic should include a general review of anatomy, pathology, and the applicable treatment protocol. Use of the EMT textbook should be avoided as it contains entry-level content, and while it may be useful for the review, CME should raise

NORTH DAKOTA RULE FOR RELICENSURE OF EMTs

The department shall relicense for a two-year period expiring June thirtieth those persons that meet the physical requirements described in the functional job analysis for emergency medical technician as published by the National Highway Traffic Safety Administration and who have met the following requirements:

- 1) Completion of a **24-hour emergency medical technician-basic refresher course**, which includes a cardiopulmonary resuscitation healthcare provider refresher, answering correctly at least seventy percent of the questions on a written examination specified by the department and passing a local practical examination meeting the department's requirements; and
- 2) Completion of **48 hours of continuing education** as approved by the department or the national registry; or
- 3) If **currently licensed** as an emergency medical technician, successful completion of the **practical examination for emergency medical technician** as established by the department. The practical examination by a licensed emergency medical services training institution in accordance with section 33-36-02-10 or by the department. **North Dakota Rules 33-36-02**

the educational standard for EMTs and address new and recent advancement in medical treatment. There are many online continuing education resources. However, these resources must be checked off and verified as being acceptable to the State and to the National Registry of EMTs or accredited by the Continuing Education Coordinating Board for Emergency Medical Services (CECBEMS), such as those found at <https://www.centrelearn.com/>. The two main trade magazines, EMS World and the Journal of Emergency Medical Services, also provide monthly CME articles.

The use of simulation mannequins can be an

important part of EMT and paramedics CME. Partnering with a training facility with a simulation program can help with skills maintenance, especially for high acuity and low-volume calls.

Distance education has also become a useful tool for EMT paramedic education. This can be used for both initial certification courses and CME. Partnering with an EMT or paramedic training center that has distance learning technology can be beneficial in rural areas where EMT and paramedic instructors may be scarce.

Run Reviews

Run reviews are an excellent form of both quality assurance and education. Run reviews are gatherings between the agency field staff and the Medical Director solely for the purpose of reviewing actual calls together. These gatherings allow the Medical Director to reinforce important clinical issues pertaining to signs and symptoms and selected treatments.

Facilitating a run review includes:

- **Run Selection — ensure patient with pertinent pathology or clinical condition**
- **Identify education/quality points for discussion**
- **Reinforce education/quality points through additional educational presentation**

If possible, ask the crew involved to present the case and then discuss elements such as dispatch, response, initial presentation, treatment and transport. Identify any issues or concerns, and always complement for excellent care provided. It is important to include any hospital follow-up and patient outcome as this allows the EMTs to view the call in the context of a complete medical encounter for the patient.

Calls that are good candidates for run reviews are:

- **Trauma with significant injury**
- **STEMI**
- **Difficult AMA or refusals**
- **Combative patients**
- **Unusual medical or trauma conditions**
- **Complicated interfacility transfers**
- **Low-volume calls — pediatrics, childbirth**

TIPS FOR TALKING WITH EMTS AND PARAMEDICS

- **Set the stage by engaging in informal conversation to create a comfortable atmosphere.**
- **Take time to listen. Show genuine interest in the EMTs' and paramedics' perspectives.**
- **Avoid medical jargon when possible, and ensure EMTs and paramedics understand the terminology you are using.**
- **Make sure your goal is improvement and not finding errors and punishment.**

Online Medical Direction

When on an ambulance call and in the midst of providing patient care, it is important that EMS personnel have a mechanism of obtaining physician input and direction. Online medical direction provides real-time instructions to EMS personnel by a physician either by phone, radio or in person. EMS personnel may request online medical direction for various issues, including treatment protocol questions, unusual cases or circumstances, AMA cases, or to help determine destination and transport decisions.

This direction is typically provided by a physician in the receiving emergency department. The agency Medical Director, however, may wish to provide online direction himself or with a designee. If other physicians are involved, the agency Medical Director has responsibility to ensure that online medical control physicians:

- **Understand the EMT scope of practice**
- **Understand treatment protocols specific to the agency requesting online medical direction**
- **Have a method to contact the agency Medical Director for questions or concerns**

Online Medical Directors should be included in the operation's quality assurance program as they will see first-hand patient care provided to the patients transported to their facilities. It is important to establish partnerships with the physicians at receiving hospitals, especially if the agency Medical Director does not work in the ER at that hospital.

Section IV:

PUTTING IT ALL TOGETHER

- **Activities and Time Requirements**

Activities and Time Requirements

The Medical Director's activity and time requirements will depend largely upon size of agency, number of calls and providers, whether BLS or ALS, and extent of involvement in daily operations. Most Medical Directors should have at least monthly EMS activity.

DAILY

- Call monitoring
- Online medical direction

WEEKLY

- Chart review and other QA activities

MONTHLY

- Education and training
- Run reviews

ANNUAL

- Skills review

AS NEEDED

- Hospital/medical staff coordination
- Remediation/complaints

A good method for becoming familiar with your agency's performance is to actually respond on calls with the crews. This can either be achieved through a "ride-along" on the ambulance or by responding in an issued emergency Medical Director vehicle.

While on scene, the Medical Director can serve many roles.

- **The Medical Director can serve as on-scene medical direction, providing advice regarding treatment and disposition to the EMS personnel.**
- **The Medical Director can simply observe and use the opportunity to identify, in a prospective manner, any quality assurance issues.**
- **The Medical Director can provide direct patient care and consultation if needed. This is especially helpful with patients who are resistant to needed treatments or transport.**

During a disaster or multiple casualty incident, the Medical Director may be asked to respond to the scene and participate as part of the National Incident Management System (NIMS) incident command structure or even asked to respond to the Emergency Operations Center (EOC) and serve as the medical resource for the political authorities. If the Medical Director responds to the scene, it is important that the physician be familiar with the incident command system. This can be attained by completing the free online ICS 100, 200 and NIMS 700 classes found at <http://training.fema.gov/is/nims.asp>. The North Dakota Department of Emergency Services also provides a number of training classes and exercises. Additional information can be found at <http://www.nd.gov/des/>.

Section V:

RESOURCES AND REFERENCES

- **Medical Director Resources**
- **EMS Medical Director Job Description**
- **Possible Quality Assurance Measures**
- **Rural Ambulance Service Quality Checklist**
- **Skills Competency and Maintenance List**
- **Suggested CME Topics**
- **Sample Chart Review Form**
- **Sample Credentialing Process Form**
- **Sample Agency MOU / Contract**

Medical Director Resources

DIVISION OF EMS AND TRAUMA NORTH DAKOTA DEPARTMENT OF HEALTH

600 E Blvd Ave, Dept. 301
Bismarck, ND 58505-0200
Office: 701.328.2388
Fax: 701.328.1702
www.ndhealth.gov/ems

NATIONAL ASSOCIATION OF EMS PHYSICIANS

P.O. Box 19570
Lenexa, KS 66285
Office: 800.228.3677
Fax: 913) 895-4652
www.naemsp.org

NORTH DAKOTA EMS ASSOCIATION

1622 E. Interstate Avenue
Bismarck, ND 58503
Office: 701.221.0567
Fax: 701.221.0693

ONLINE MEDICAL DIRECTOR COURSE

www.medicaldirectoronline.org

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION OFFICE OF EMS

1200 New Jersey Avenue S.E.
Washington, DC 20590
Office: 202.366.5440
Fax: 202.366.7149
www.ems.gov

AMERICAN COLLEGE OF EMERGENCY PHYSICIANS

1125 Executive Circle
Irving, TX 75038-2522
Office: 800.798.1822
Fax: 972.580.2816

READING RESOURCES

Clinical Aspects of Prehospital Medicine, Vol. I, Medical Oversight of EMS, Vol. II, Evaluating and Improving Quality in EMS, Vol. III, Special Operations Medical Support, Vol. IV.
NAEMSP, Kendall Hunt Professional, 2009

Future of Emergency Care: Emergency Medical Services at the Crossroads
Institutes of Medicine of the National Academies, 2006

Rural and Frontier Emergency Medical Services: Agenda for the Future
National Rural Health Association, 2004

EMS Workforce for the 21st Century: A National Assessment
National Highway Traffic Safety Administration: Office of Emergency Medical Services, 2008

EMS Agenda for the Future
National Highway Traffic Safety Administration: Office of Emergency Medical Services, 1996

Principles of EMS Systems, Third Edition
(Brennan J., Krohmer, J.) Jones & Bartlett, 2006

EMS Medical Director Job Description

POSITION DESCRIPTION

- The EMS Medical Director is responsible for the overall training, supervision and credentialing of all licensed EMS personnel functioning within the system.
- The Medical Director also develops and oversees the system quality assurance program and initiatives.
- This is a part-time position that is expected to take 10–20 hours per month to fulfill the goals and responsibilities of the position.

REPORTS TO

EMS Agency Administrator/Political Body

REQUIREMENTS

- Maintain current North Dakota medical license.
- General knowledge of EMS with specific knowledge of licensure levels, scopes of practice, and EMS skills and procedures.
- Completion of formal Medical Director Training Course (preferred).

DUTIES

- Development of credentialing process to ensure provider competency in education and skills.
- Develop and oversee quality assurance program, including state-required chart reviews and other initiatives pertinent to the agency.
- Participate in:
 - *Chart review*
 - *Continuing education programs*
 - *Disciplinary proceedings*
- Development and adoption of patient treatment protocols.
- Liaison with online medical control physicians and general medical community.
- Participate in regional and state EMS activities and initiatives, including advisory committees.

Possible Quality Assurance Measures

[Examples]

General

- **Fractile response times:**
 - *Call to dispatch*
 - *Dispatch to response*
 - *Response to patient arrival*
 - *On-scene times*
- **Procedure Success rates**

Trauma

- **On-scene times**
- **Spinal immobilization**
- **Patient temperature upon arrival to ER**

Medical

- **Aspirin for cardiac chest pain**
- **Two sets of vital signs on PCR**

Cardiac Arrest

- **CPR density (*percentage of time spent doing CPR during code*)**
- **Ventilation rate**
- **Delays and interruptions in CPR**
- **Bystander CPR**
- **Public access AED use**

Rural Ambulance Service Quality Checklist

This checklist is designed to be regularly completed after a specific measurement period determined by the ambulance service. The measurement period may be monthly, quarterly, semiannually or annually. Use the checklist to start your quality program.

Ambulance service _____

Measurement period dates: from _____ **to** _____

1) CONTINUOUSLY IN SERVICE

During the measurement period, the ambulance service was continuously available for service (did not go out of service because of staffing, vehicle or other issues).

☐ Yes ☐ No

2) RESPONSE RELIABILITY

During the measurement period, the ambulance service responded to all requests for service (excluding requests that came when the ambulance service was unavailable because of being on another call).

☐ Yes ☐ No

3) RESPONSE TIMES

During the measurement period, the ambulance service has recorded, tracked and met state response time requirements, including chute times (the time from first page to wheels rolling to the call) and response times to the emergency scene (the time from first page to arrival on the scene). (See ND Rules for Ground Ambulance Services 33-11-01.2-17 for specific time requirements)

☐ Yes ☐ No

4) ON-SCENE TIMES

For the measurement period, the ambulance service has recorded and reviewed all on-scene times (the time from arrival on the scene to departure to the hospital) for appropriateness to the specific situation and deemed them to be appropriate.

☐ Yes ☐ No

5) ALS INTERCEPTS

During the measurement period, an ALS intercept was initiated for all patients with chest pain or myocardial infarction symptoms, cardiac arrests, severe respiratory distress, respiratory arrest or severe traumatic injury.

☐ Yes ☐ No

6) COMPLETENESS OF PATIENT CARE REPORTS

For the measurement period, all patient care reports have been reviewed by the ambulance service Quality Coordinator for completeness, including vital signs and accurate call times.

☐ Yes ☐ No

7) PROTOCOL COMPLIANCE

For the measurement period, all patient care reports have been reviewed by the service Quality Coordinator for appropriate care and protocol compliance.

☐ Yes ☐ No

8) MAJOR CALLS ARE REVIEWED WITH MEDICAL DIRECTOR

For the measurement period, all patient care reports that involved cardiac arrest, traumatic arrest, severe respirator distress or arrest, major trauma, and/or challenging clinical care management have been submitted to the Medical Director for review and feedback was received.

☐ Yes ☐ No

9) TRAUMA, CARDIAC AND STROKE CARE AND DESTINATIONS

For the measurement period, all patient care reports that involved major trauma, possible myocardial infarction, or possible stroke were evaluated for compliance with local policies, protocols and destinations.

☐ Yes ☐ No

10) CARDIAC ARRESTS

For the measurement period, all cardiac arrest calls were reviewed for appropriate care, response time, on-scene time and transport time.

☐ Yes ☐ No

Date completed _____

Signature of Quality Coordinator _____

Skills Competency and Maintenance List

[Example]

As part of initial and ongoing credentialing, the following skills will be reviewed on at least an annual basis. Skills will be picked randomly to include the following:

1) SKILLS TO BE TESTED AT EMR/EMT LEVEL:

- **Four (4) random skills to be chosen from the National Registry skills test:**
 - a. Upper airway adjuncts and suction
 - b. Bag-valve mask
 - c. Bleeding control/shock management
 - d. AED
 - e. Immobilization — joint
 - f. Immobilization — long bone
 - g. Immobilization — traction
 - h. Oxygen administration
 - i. Patient assessment — medical
 - j. Patient assessment — trauma
 - k. Spinal immobilization — seated
 - l. Spinal immobilization — supine
- **For EMT-B, four (4) random skills to be chosen from the System skills test:**
 - a. Monitor set-up
 - b. Radio, telephone and patient transfer report
 - c. IV set-up
 - d. Ambulance compartment and jump bag inventory
 - e. Radio procedures
 - f. Run reports
 - g. GPS, air ambulance dispatch and landing zone
 - h. Mapping
 - i. Glucometry

2) SKILLS TO BE TESTED AT ADVANCED EMT LEVEL:

- **Two (2) mandatory skills from the National Registry skills test:**
 - a. Endotracheal intubation for the adult patient.
 - b. IV therapy.
- **Two (2) random skills from the National Registry skills test:**
 - a. As listed under EMT above.
- **Four (4) random skills from the System skills test:**
 - a. As listed under EMT above

3) SKILLS TO BE TESTED AT PARAMEDIC LEVEL:

- **Complete a mega-code test for the adult and pediatric patient.**
- **The Ultra-code will be scenario-based, and all skills and interventions must be accomplished on the manikin to national standards.**
- **Scenarios can be based on either the prehospital setting or the interfacility transport setting.**
- **Skills and medications that are used infrequently will be tested during these scenarios to ensure consistent proficiency levels for those areas.**
- **Each mega-code will contain four (4) scenario progressions.**

Suggested CME Topics

Trauma

- Head trauma
- Spinal trauma
- Multi-system trauma
- Trauma in elderly
- Pelvic trauma

Medical

- Chest pain/Acute Coronary Syndrome
- Allergic reaction/anaphylaxis
- Diabetic emergencies
- Respiratory/asthma/COPD
- Stroke

Pediatrics

- Trauma.
- Fever and general pediatric illness
- Apparent Life Threatening Event (ALTE)
- Respiratory/Croup/RSV

OB

- Normal labor and delivery
- Trauma in pregnancy

General

- EMT wellness
- HIPPA
- Infection control

Sample Chart Review Form

Chart Review Form

Date: _____

Run # _____ Crew: _____

Standard	Yes	No	Comment
2 Sets of VS?			
Protocol Followed			
Narrative			
Signatures			
Call involves: <ul style="list-style-type: none"> • Cardiac Arrest • Chest Pain • Respiratory arrest or airway compromise • Major Trauma • Stroke • Unconscious • Pediatric • Use of restraints • Any protocol deviation 			If yes, then refer to medical director for review.

Medical Director Review:

Sample Credentialing Process Form

Credentialing Process Form

Provider _____ Agency _____

Level of Credentialing: EMR ☐ EMT ☐ Adv. EMT ☐ Paramedic ☐

State EMS Licensure _____ Exp _____

CPR _____ Exp _____

ACLS (paramedic) _____ Exp _____

PALS (paramedic) _____ Exp _____

(Please provide copies of above certification cards)

Date and Signature of Preceptor

Agency Orientation _____

Skills Verification _____

Field Training Program: _____

The above provider has successfully completed all requirements for credentialing in the _____ EMS Agency and is fully credentialed at the level of _____.

Provider understands and agrees to adhere to all requirements for continuous credentialing within the system. Failure to do so will result in loss of credentials and need for recompletion of the process.

_____	_____	_____	_____
Provider	Date	Medical Director	Date

Sample Agency MOU / Contract

INDEPENDENT CONTRACTOR AGREEMENT

AGREEMENT made and entered this ____ day of _____, 20__ by and between _____, ND, a *political subdivision/ambulance service* of the state of North Dakota ("Service") and Dr. _____ (Contractor).

WHEREAS, the Service and Contractor desire to enter into an agreement for the provision of professional services to assist the _____ Ambulance Service (Service) as _____ Emergency Medical Services Medical Director (EMSMD) , and;

WHEREAS, the Service is duly authorized and empowered to enter into such an agreement, and the _____ is duly authorized and empowered to enter into such an agreement on behalf of Service;

NOW THEREFORE, in consideration of the above recitals, the agreements, covenants, conditions and mutual promises herein set forth, it is hereby agreed as follows:

1. Services Provided. Service and Contractor agree that Contractor shall provide services as Medical Director as directed by the Ambulance Board/Political body. Service and Contractor agree that Contractor will have responsibility for both Online and Offline Medical Direction.

2. Duties of Contractor. The Contractor shall oversee all medical aspects of both rescue and dispatch in _____. EMSMD authority and responsibilities will include those established in the rules of the North Dakota EMS Bureau, including but not limited to:

- The EMSMD will hold responsibility and ultimate authority of medical oversight of both structure and operations, including both direct and indirect medical oversight.
- The EMSMD shall maintain liaison with other physicians including Medical Directors and local emergency department physicians, and attend regional and state meetings.
- The EMSMD is to interact with regional, state and local EMS authorities to ensure standards, needs and requirements are met and resource utilization is optimized.
- The EMSMD is to provide liaison with the state Dept. of Health and state EMS Advisory Committee.

- The EMSMD will collaborate agency chief officers on a procedure for the management of complaints involving EMS and EMD.
- The EMSMD will direct the development of agency/department Standard Operating Guidelines (SOG) and policy development as it relates to the EMS and EMD
- The EMSMD may appoint supervising physicians for direct medical control and for indirect medical control in his /her absence.
- The EMSMD shall evaluate pre-arrival instructions rendered by the EMD personnel and maintain direct participation in the EMD system evaluation and continuous quality improvement process.
 - Direct Medical Oversight:
- Direct medical oversight is the contemporaneous medical consultation and direction provided by the on-duty emergency department physician at _____ Center by telephone or radio to EMS providers in the field. This consultation will be consistent with the System Operating Guidelines and scope of practice of the credentialed EMS personnel.
 - Indirect Medical Oversight:
- Indirect Medical Oversight is provided by the EMSMD who is responsible for the ultimate medical accountability and appropriateness of the system including overall system design, implementation and evaluation.
- Prospective:
 - The EMSMD will develop, review and approve EMS protocols or guidelines for all certified EMS providers in _____ with the option to amend or adjust to meet specific needs.
 - The EMSMD will advise individual agencies on continuing education for EMS providers to meet state and national requirements and guidelines and to meet identified quality goals.
- The EMSMD will review and approve before implementation, new and emerging technologies in ambulance and rescue equipment, supplies and operations.
- The EMSMD should be involved with local and regional EMS for disaster and mass casualty planning.
- The EMSMD should be involved in coordination of activities such as mutual aid, backcountry rescue, tactical and HAZMAT exposures.

Sample Agency MOU / Contract - *continued*

- Retrospective:
 - The EMSMD will oversee a quality assurance program including evaluation of EMS personnel.
 - The EMSMD may provide individual consultation and written evaluation of each/any EMS provider at his/her discretion.
 - The EMSMD will provide counseling to specific EMS providers if inappropriate care is rendered. This is to be followed with targeted instruction and follow-up. The EMSMD may withhold or qualify credentials of any EMS provider as deemed necessary.
 - The EMSMD should be involved in disciplinary proceedings of EMS providers when patient care issues are involved.

3. Term of Agreement. The term of this agreement shall be for the period beginning on the effective date hereof and ending _____. However, either party may terminate this agreement without cause before the end of the term by providing thirty (30) days' written notice of such termination to the other party.

4. Compensation. Service agrees to pay Contractor as compensation _____ for general and specific assignments as determined by the Board.

5. Entire Agreement. This instrument constitutes and embodies the entire integrated agreement between the parties relative to utilizing Contractor's services as a Contractor. The parties agree that all prior and contemporaneous oral and written agreements between and among themselves and their agents and representatives relating to the Contractor services as an Contractor are merged into and superseded by this agreement.

6. Amendment. This agreement may be altered, amended, modified or revoked only by written instrument duly executed by the parties hereto.

7. Waiver. The failure of any party to insist upon strict performance of any of the obligations contained herein shall not be deemed a waiver of any rights or remedies that said party may have, and shall not be deemed a waiver of any preceding or subsequent breach in the performance of any of the terms and provisions contained herein by the same or any other person. No covenant, term or condition or the breach thereof

shall be deemed waived, except by the written consent of the party against whom the waiver is claimed.

8. Assignment. Contractor may not assign, sub-contract or delegate his/her rights and duties hereunder to any person or entity without the prior written consent of the Service.

9. Authority of Board. Contractor understands and agrees that only the _____ Service is empowered to alter, amend, modify, revoke and permit waiver, assignment, sub-contract and delegation under this agreement on behalf of Service. Contractor shall not rely upon any representation, warranty or other statement by any other contractor or agent of Service, and any such reliance by Contractor shall be at Contractor's peril and shall not give rise to any claim or cause of action, in law or equity, against Service, its contractors or agents.

10. Representations. Contractor agrees and warrants that in entering into this agreement it has relied upon no representations, express or implied, of Service, its contractors or agents, or of the Board that are not expressly stated herein.

11. Successors and Assigns. Unless otherwise provided in this agreement, this agreement inures to the benefit of and will be binding upon the parties and their respective heirs, representatives, successors and permitted assigns.

12. Third-Party Beneficiary Rights. This agreement is not intended to create, nor shall it be in any way interpreted or construed to create, any third party beneficiary rights in any person not a party hereto unless otherwise expressly provided herein. It further is not intended to create any substantive or procedural right for an applicant not otherwise provided in code.

13. Construction. No presumptions shall exist in favor of or against any party to this Agreement as a result of the drafting and preparation of this agreement. The headings and captions of paragraphs of this agreement are for convenience only and shall not be deemed to be relevant in resolving any question of interpretation or construction of this agreement.

14. Severability. If any term or provision of this agreement shall to any extent be determined by a court of competent jurisdiction to be invalid or unenforceable, the

remainder of this agreement shall not be affected thereby, and each term and provision of this agreement shall be valid and be enforceable to the fullest extent permitted by law.

15. Governing Law and Venue. All disputes arising out of or related to the formation, interpretation, performance and enforcement of and under this agreement shall be governed by the laws of the state of Idaho. Contractor hereby consents to the jurisdiction and venue of the state courts of Idaho to resolve any and all such disputes with Service, and Contractor waives all defenses to such jurisdiction and venue including, but not limited to, any defense based upon inconvenient forum.

16. Service of Notices. Any notice hereunder may be served upon Service by certified mail to Service at _____, and any notice may be served upon Contractor by certified mail to _____. Service of a notice by certified mail shall be deemed complete upon the date of the postmark by certified mail. Either party may change the address for services of notice by written notice to the other party.

17. Hold Harmless Clause. _____ agrees to indemnify, defend and hold harmless Contractor from any and all claims, costs, liability, judgment, complaint, judicial review petition or cause of action filed against Contractor relating to a claim based upon acts or omissions of Contractor performed within the scope of her duties under this agreement, no matter what the basis of the claim, complaint or liability may be, including negligence but excluding the intentional and willful misconduct of Contractor. _____ retains the right to determine legal counsel to represent Contractor in any such claim, cost, liability, judgment, complaint, judicial review petition or cause of action filed against Contractor in her individual capacity, subject to the approval of Contractor, which approval shall not be unreasonably withheld. Contractor shall not be liable to Service for any activities of Contractor undertaken by Contractor pursuant to this agreement, no matter what the basis of the claim, complaint or liability (including contribution) may be, including negligence but excluding the intentional and willful misconduct of Contractor.

18. Workers' Compensation. While performing duties within the scope of the professional services, as set forth herein, Contractor shall be covered under Service's workers' compensation liability policy.

19. Attorney's Fees. If either party hereto brings an action or proceeding to enforce the terms of this Agreement or to declare rights hereunder, the prevailing party in any such proceeding, action or appeal thereof, shall be entitled to reasonable attorney fees.

EXECUTED and effective as of the day and year provided herein.

By: _____

Attest: _____

CONTRACTOR:

**North Dakota Rural EMS Improvement Project
2011**